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**From:** Sayles, Gregory  
**Sent:** Sat 8/15/2015 11:53:56 PM  
**Subject:** Fwd: EOC Spot Report Update #9: Region 8, Gold King Mine Release into Animas River; San Juan County, CO

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Begin forwarded message:

**From:** "Eoc, Epahq" <Eoc.Epahq@epa.gov>  
**Date:** August 15, 2015 at 6:47:07 PM EDT  
**To:** "Eoc, Epahq" <Eoc.Epahq@epa.gov>  
**Subject:** EOC Spot Report Update #9: Region 8, Gold King Mine Release into Animas River; San Juan County, CO

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**EOC Spot Report Update #9: Region 8, Gold King  
Mine Release into Animas River; San Juan County,  
CO**

## **US Environmental Protection Agency**

**Report as of 1830 EDT on 08/15/2015**

### **Overview:**

On 8/5, an EPA and Colorado State Division of Reclamation Mining and Safety team was working to investigate and address contamination at the abandoned Gold King Mine in San Juan County, CO. This work resulted in a large release of mine wastewater into the upper portions of Cement Creek. Initial estimates indicated that the release was approximately one million gallons that was held behind unconsolidated debris near an abandoned mine portal. The estimate has since been revised to 3 million gallons. There were several workers at the site at the time of the breach and all were unharmed. The release's path flows through three of EPA's regions: Region 8—Colorado, Utah and the Southern Ute Tribe; Region 6--New Mexico; and, Region 9--Navajo Nation.

The mine water is being treated in a series of settling ponds constructed near the portal. The treatment appears to be effective. The pH of the water is being raised with the addition of lime and sodium hydroxide solution to facilitate sedimentation of the metals in the ponds and flocculant is being added to increase the amount of sedimentation. The treated water that is being discharged to Cement Creek has a pH of 5.5. Baseline water quality data from the past 17 years has been obtained and will be compared with the new water quality data. EPA is making upgrades to the wastewater treatment system to ensure its continued operation.

The incident caused a spike in concentrations of total and dissolved metals as the contaminated mine water moved downstream. These concentrations began to trend toward pre-event conditions by 8/6. The contaminant plume is depositing sediments and EPA is beginning to assess the impacts of the sediment. All municipal drinking water systems along the Animas River in Colorado, New Mexico, and Utah either are using alternate water sources or have enough clean source water stored that they have not had to shut down.

**State, Local and other Federal Agency Actions:** San Juan County officials are engaged in the response activities. State officials are also on scene. Following the release, the Colorado Department of Public Health and the Environment (CDPHE) notified water users downstream so they could take appropriate steps to turn off intakes until the contaminated water passes. The U.S. Geological Survey (USGS) measured increased river flows and

provisionally calculated flow volume of approximately 3 million gallons discharged from the Gold King Mine. The La Plata County Sheriff opened the Animas River to recreational use on 8/14 with a health advisory from CDPHE. A Colorado State veterinarian has cleared water use for animals.

On 8/14, NMED and the Department of Health lifted the ban on using private water wells. On 8/14, the City of Durango resumed pumping water from the Animas River for further treatment. This decision was made in conjunction with the CDPHE. The City will continue to analyze water quality samples, based on pre-established protocols. The City has also lifted the outdoor irrigation restrictions.

### **EPA Actions:**

*Response Organization:* EPA is integrated in Unified Command in Durango, CO and in three Incident Command Posts (ICPs) in Silverton and Durango, CO, Farmington, NM with a branch Lake Powell (at the Arizona and Utah Border). Unified EPA Area Command has stood up operations out of Durango, CO with representatives from EPA Regions 6, 8 and 9.

A public-facing website has been set up for the response: <http://www2.epa.gov/goldkingmine>. Administrator McCarthy arrived in Durango, CO on 8/12 to tour the Animas River and meet with members of Unified EPA Area Command. On August 13, the Administrator was in Farmington, NM.

EPA is reviewing sampling data and developing public messaging to include the development of a wider message that river conditions are returning to normal. This will include the development of Q&A sheets and fact sheets.

A pilot test flush of the Animas Consolidate Irrigation Ditch was conducted late in the day on 8/12. The purpose of the test was to visually evaluate sediment transport conditions that would occur upon partially opening the control gate. Ferrous sediments were observed to have been deposited bank to bank in the channel as a result of the mine release.

*Sampling and Data Review:* The HQ Environmental Unit (EU) continues to assist with data validation. Daily residential sampling is occurring. Animas River sediment samples were posted to the incident website on 8/14. No results exceeded recreational screening levels.

A draft sampling plan is being developed to address sampling and analysis of river water,

sediment and well water. This plan is being developed jointly by Regions 8, 6 and 9. EPA received comments from NMED regarding the draft Sampling Plan and EPA will evaluate NMED's comments for inclusion in the final version. Sampling will continue throughout the impacted area. EPA will be jointly evaluating data and information with partners to determine when access to the Animas River will be restored for irrigation and drinking water. EPA, Tribal, State and local officials are coordinating these decisions based on sampling data, risk screening levels and other related factors. The State of Colorado has developed screening levels for agricultural exposure. Based on the data thus far, EPA and ATSDR do not anticipate adverse health effects from exposure to the metals detected in the river water samples from skin contact or incidental (unintentional) ingestion. Similarly, the risk of adverse effects on livestock that may have been exposed to metals detected in river water samples from ingestion or skin contact is low.

*Water Delivery and Supply:* NMED informed EPA that the Town of Morningstar's reserve had dropped drastically and the Town only had an estimated 48 hours of available supply as of 8/14. EPA is acting quickly to mobilize a temporary pump to facilitate an emergency connection between Farmington and Morningstar.

EPA is paying for water hauling services to deliver water to areas served by wells on the Navajo Tribal Utility Authority – Montezuma Creek public water system, which was shut down as a precaution.

*Claims:* EPA has a claims process for compensating citizens who suffer personal injury or property damage caused by U.S. government actions. The process includes guidance on documentation that may be required to support claims for loss of employment and loss of income, among other claims. Region 8 has had inquiries about such claims from business owners in CO.

See previous reports for past EPA regional and HQ actions.

**Media Interest:** High

<http://www.cnn.com/2015/08/13/us/colorado-epa-animas-river-spill-owner/index.html>

<http://nmpoliticalreport.com/10024/what-reporters-on-the-ground-are-hearing-about-animas-river-spill/>

<http://www.washingtontimes.com/news/2015/aug/12/gold-king-mine-spill-democrats-green-activists-scr/>

<http://www.latimes.com/opinion/op-ed/la-oe-0813-reynolds-mining-disaster-20150813-story.html>

<http://www.cnn.com/2015/08/12/opinions/pagel-animas-river-pollution/index.html>

<http://www.csmonitor.com/USA/2015/0812/Mine-waste-in-Animas-and-San-Juan-Rivers-looks-better-for-now-video>

[http://www.bostonherald.com/news\\_opinion/national/2015/08/damages\\_in\\_colorado\\_mine\\_spill\\_will\\_take\\_y](http://www.bostonherald.com/news_opinion/national/2015/08/damages_in_colorado_mine_spill_will_take_y)

**The HQ EOC will continue to monitor and provided updates as needed.**

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